

## November 19, 2003 - System Issues and Status

**Table 1: Process Strategy/Geier as of 11/19/03  
Active Requests in order of priority (1 of 2)**

<b>Production Request (PR)</b>	<b>Satellite</b>	<b>Production Strategy</b>	<b>Data Product</b>	<b>Data Dates</b>	<b>Special Status</b>
PR 99-03		GEOS4	MOA	2/25/00 - 12/31/03	Rerun 2/25/00 - 9/00 when MOA redelivery promotes.
PR 110-03, 111-03	Terra	ValR1A/ ValR1B	SSF	Select hours of 6/00	Done 11/13/03.
PR 108-03	Terra/ FM1	Edition2	SCC	2/00 - 1/01	Done 10/27/03.
PR 100-03, 101-03	Terra	ValR1	SSF	6/00	Done 10/31/03.
PR 96-03, 97-03	Terra	Edition2-QC	SSF	3/00 - 2/03	Clouds running; Inversion holding.
PR 109-03		GEOS4	PMOA	3/1/00 - 12/31/03	
PR 106-03, 107-03		ValR9, ValR9E	GGEO	3/00 - 2/03; every 3rd month	Waiting on delivery.
PR 103-03 to 105-03	Terra	Beta3, Beta3B, Beta3E	SRBAVG	3/00 - 2/03; every 3rd month	No delivery needed.
PR 95-03	Terra	Beta2	SFC	3/00 - 2/03; every 3rd month	No delivery; run for same months as ValR9 GGEO using Edition2-QC.
PR 92-03	Terra	Beta5 (Inversion only)	SSF	1/01 - 10/02	Done 10/21/03.
PR 102-03	Terra	Beta5	CRS	FM2: 1/2/01	Done.
PR 94-03	Terra	Beta5	CRS	1/01 - 12/01	Beta5 SSF input; Process crosstrack only.
PR 93-03	Terra	Beta5	FSW	1/01 - 12/01	Processing.
Standing requests PM-PR 23-02 to 30-02 and PM-PRs 1-03, 3-03 to 6-03	Aqua	Baseline1  Edition1	BDS/ ERBElke BDS/ ERBElke	For 6/03 - present	

**Table 1: Process Strategy/Geier as of 11/19/03**  
**Active Requests in order of priority (2 of 2)**

<b>Production Request (PR)</b>	<b>Satellite</b>	<b>Production Strategy</b>	<b>Data Product</b>	<b>Data Dates</b>	<b>Special Status</b>
Standing request PM-PR 2-03	Aqua/Terra	Edition1	ES4/ES9	For 6/03 - present	
Standing requests AM-PR 1-00 to 7-00	Terra	Edition1	BDS/ERBELike	For 6/03 - present	
M-PR 3-02		NSIDC-NES-DIS	EICE ESNOW	Standing request	
PR 102-03	Terra	Beta5	CRS	FM2: 1/16/01, 1/30/01, 6/5/01, 6/19/01; FM1: 3/13/01, 3/27/03	Selected alongtrack days.
PR 96-03, 97-03	Terra	Edition2-QC	SSF	3/03 - 6/03	Run at LOW priority after 2/03 finishes.
PR 61-03	Terra	Beta1	Synoptic SARB	1/01, 4/01, 7/01	<b>ON HOLD</b> Requires redelivery currently scheduled 10/3/03. Full delivery fixes segmentation faults, rerun TRMM data.

**Table 2: Process Strategy/Geier as of 11/19/03  
Coming Soon**

Active Month	Satellite	Processing Strategy	Data Product	Data Dates	Comments
12/03	Terra	ValR2 (Inversion only)	SSF	Several days, up to 2 month	Waiting on delivery. This must be approved before Edition2A starts.
	Terra	Edition2A (Inversion only)	SSF	3/00 - 6/03	Production starts once ValR2 approved.
	Aqua	Beta2	SSF	10/02	Waiting on delivery. Include renamed MODIS aerosol parameter; 4x2 MODIS; every other SSF FOV when $vzen < 63$ deg; 7/1 Inversion delivery handles latest SRF.
	Aqua	Beta1	CRS	10/02	Preprocessor redelivery needed; delivery needed 10/10/03.
	Terra	Beta6	FSW	1/01 - 12/01	10/31/03 delivery. Picks up new CRS parameters.
	Aqua	Beta1	FSW	0/02	Requires redelivery of 6.3; currently scheduled together with Terra delivery that picks up additional CRS parameters; delivery expected 10/31/03.
1/04	Terra	Beta2	TSI	3/00 - 2/01	Delivery need date 11/7/03.
	Terra	Beta1	SYN/AVG/ZAVG	1/01, 4/01, 7/01	
	Aqua	Beta1	TSI		Not on Bruce's schedule.
	TRMM	Beta2	Synoptic SARB	4/98, 7/98, 8/98	Rerun 3 months of SYNI to use as input for SYN/AVG/ZAVG.
	TRMM	Beta1	SYN/AVG/ZAVG	4/98, 7/98, 8/98	Delivered 8/22; If compressed HDF available when synoptic SARB delivers, TISA code will be redelivered.
	Aqua	Beta1	Synoptic SARB		Not on Bruce's schedule.
	Aqua	Beta1	SYN/AVG/ZAVG		Not on Bruce's schedule.

**Table 3: November 19, 2003 - System Issues and Status**

<b>Activity</b>	<b>Lead</b>	<b>Status</b>
CM	Ayers	<ul style="list-style-type: none"><li>• See Table 4 for SCCR activity since the last DMT meeting. SCCRs that need to be reviewed follow Table 4. (Ayers)</li><li>• Tested the following deliveries and released them to the ASDC: TISA Gridding (SCCR 476), TISA Averaging (SCCR 462), and CERESlib (SCCR 483). (Ayers, Saunders)</li></ul>

**Table 4: SCCR Activity November 3 at 12:30 p.m. - November 17 at 12:30 p.m.**

<b>SCCR</b>	<b>S</b>	<b>U</b>	<b>A</b>	<b>C</b>	<b>D</b>	<b>SS</b>	<b>Page No.</b>	<b>Comments</b>
462		X	X			8	5	
482	X		X	X		2 & 3	6	CERESlib modifications
483	X		X	X		CERESlib	6	

S=Submitted; U=Updated; A=Approved; C=Closed; D=Disapproved; SS=Subsystem

## CERES Software Configuration Change Request Submittal

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Subsystem: TISAavg8.0

SCCR Date: 2003-08-14 18:10:48

SCCR Number: 462

### Description of Change (Science):

1. Read the SYNI data from SS7.2.
2. Average the hourly TSI and SYNI data to produce SYN synoptic hour data
3. Average the SYN synoptic data to produce AVG/ZAVG monthly hourly and monthly data
4. Modify the AVG/ZAVG HDF format to include new parameters.

### Reason for Change (Science):

Requested by the scientists.

### Description of Change (non-Science):

1. Add code to output daily SYN HDF files.
2. Update the number of hours used in structures and in the averaging routines to include 24 (all hours used in SS10) and 8 (number of synoptic hours used in SS8).
3. Change the AVG/ZAVG output file format from HDF to binary and write new programs to convert the binary files to HDF.

### Reason for Change (non-Science):

To produce the new data format as requested by the scientists.

Note: Only 32 HDF files can be opened at one time. Therefore, the AVG/ZAVG files were changed to binary so that 31 SYN HDF files could be opened. After all the files are closed, the binary files are converted to HDF.

Affected PGEs : CER8.1P1

Est. Time to Complete Changes : One week

Planned Delivery Date : August 22

Impact : None

Originator: NGUYEN, CATHY (SAIC)

### ADDITIONAL CHANGES TO SCCR NO. 462:

### Description of Change (Science):

5. SS10 averaged code were modified to correct errors. Replaced the averaged code in SS8 with the updated SS10 averaged code.

### Reason for Change (Science):

For validation and correction purposes

### Description of Change (non-Science):

The HDF compression for SYN, AVG and ZAVG is included.

### Reason for Change (non-Science):

To reduce the HDF file sizes

Affected PGEs : CER8.1P1

Est. Time to Complete Changes : Complete

Planned Delivery Date : November 10, 2003

Impact : None

Originator: NGUYEN, CATHY (SAIC)

### **CERES Software Configuration Change Request Submittal**

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\*\*\* All changes described in this SCCR were made in CERESlib. \*\*\*

Subsystem: ERBEl like

SCCR Date & TIME: 2003-11-10 14:03:45

SCCR No.: 482

Description of Change (Science):

N/A

Reason for Change (Science):

N/A

Description of Change (non-Science):

1. To provide an overall routine to read an hdf file and generate the identical file with all SDS's compressed.

Reason for Change (non-Science):

1. Generating hdf files with compressed SDS's will save a significant amount of storage space.

Affected PGEs

: None

Est. Time to Complete Changes

: 1 day

Planned Delivery Date

: November 11, 2003

Impact

: None

Originator: KIZER, EDWARD A. (SAIC)

### **CERES Software Configuration Change Request Submittal**

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\*\*\* All changes described in this SCCR were made in CERESlib. \*\*\*

Subsystem: CERESlib

SCCR Date & TIME: 2003-11-12 11:42:37

SCCR No.: 483

Description of Change (Science):

N/A

Reason for Change (Science):

N/A

Description of Change (non-Science):

see SCCR #482 (HDF compression routine)

Reason for Change (non-Science):

see SCCR #482

Affected PGEs

: none

Est. Time to Complete Changes

: N/A

Planned Delivery Date

: Wednesday November 12, 2003

Impact

: none

Originator: STASSI, JOE C. (SAIC)

**Table 5: November 19, 2003 - Subsystem Issues and Status (1 of 4)**

<b>SS No.</b>	<b>SS Lead</b>	<b>Status</b>	<b>Problems</b>
1.0	Cooper	<ul style="list-style-type: none"><li>Continued tracking receipt of Aqua and Terra data. (Cooper, Snyder)</li><li>Continued testing of the code updates to add double drift correction for Aqua Edition2 processing. (Cooper, Escuadra, Spence)</li><li>Verifying double drift correction implementation. Analyzing BDSs created using the updated code to verify the updates are working as expected. (Spence)</li></ul>	
2.0	Kizer	<ul style="list-style-type: none"><li>Began preparing ERBE-like software for scheduled delivery. Reevaluating usage of input files for idl programs. (Kizer)</li><li>Continuing to modify the SS3 Operator's Manual to show additional scatter plots and ES-4 statistics plots. (Kizer)</li><li>Continuing to examine the production email generated by the QC checker software. (Walikainen)</li><li>Continuing to inspect ERBE-like Aqua and Terra output plots and QC reports on the Web. (Walikainen, Kizer)</li></ul>	
3.0	Kizer	Combined with above.	
4.1	Sun-Mack	<ul style="list-style-type: none"><li>Completed processing TRMM VIRS Edition2 CloudVis data for the Cape Verde and Ascension through December 1999. Completed processing Terra Modis Edition1A CloudVis images for the Alaska ARM NSA Site through October 2002. (R. Brown)</li><li>Processed Zonal Cloud Amount Seasonal QC Results for Terra MODIS Edition1A from March 2000 through October 2002. Processed Zonal and Zonal Cloud Amount Seasonal QC Results for TRMM VIRS Edition2 from January 1998 through July 2001 and for TRMM VIRS Edition1 from January 1998 through August 1998 and March 2000. Wrote scripts for all the seasonal results and incorporated them into current QC Results that are posted on the web. (R. Brown)</li></ul>	

**Table 5: November 19, 2003 - Subsystem Issues and Status (2 of 4)**

<b>SS No.</b>	<b>SS Lead</b>	<b>Status</b>	<b>Problems</b>
4.1	Sun-Mack (Cont.)	<ul style="list-style-type: none"> <li>• Processed Monthly QC results for Terra MODIS Edition2-QC data for March and April 2000 and posted results on the web. Also produced Val R1 Edition 2 QC results for June 2000. (R. Brown)</li> <li>• Wrote, debugged and completed MODIS monthly product reader. Communicated with MODIS team personnel. Processed MODIS monthly product from March 2000 through Sept. 2001. Wrote web pages and perl scripts to post the MODIS monthly product. (Sun-Mack)</li> <li>• Processed Terra-MODIS SGP overpasses (about 2 years of SGP granules: March 2000 -- Dec. 2001) with Clouds Edition2 version. The results were averaged for both 30x30km and wind-stripped, and posted the on the web. (Sun-Mack)</li> <li>• Worked with Marjolaine Chiriaco on validations. (Sun-Mack)</li> </ul>	
4.2	Sun-Mack	Combined with above.	
4.3	Sun-Mack	Combined with above.	
4.4	Miller	<ul style="list-style-type: none"> <li>• The ValR1 data was validated. This included reviewing almost all parameters of a day of SSF data 20000609 using view_hdf. A problem with the Second Generation Aerosol Flag being set when there was no aerosol data was discovered. (Miller)</li> <li>• Terra Edition2-QC clouds production was monitored. Thirty-two hours failed in the last 5 days of February 2000. This was initial instrument operations. Twenty-two hours failed in March 2000. Missing IES and MODIS data was the cause for these missing hours. (Miller)</li> <li>• The broadband vs. narrowband regression was completed for the last seven data months of Terra Edition1A processing. Aqua Beta1 data for two months were obtained. Updated graphics for Terra were produced. (Miller)</li> <li>• Convolution code was updated for Aqua processing. (Miller)</li> </ul>	



**Table 5: November 19, 2003 - Subsystem Issues and Status (3 of 4)**

<b>SS No.</b>	<b>SS Lead</b>	<b>Status</b>	<b>Problems</b>
4.5	Nolan	<ul style="list-style-type: none"> <li>Continued work to add SW and LW Terra Edition2 ADM software to PGE CER4.5-6.3P2. Added code to stop execution of PGE if MOA version does not match version used in cloud processing. (Nolan)</li> <li>Modified PGE4.5-6.5P1 to handle the new parameter 'admgeo' added to the ssf_typdef.f90. (Hoppe)</li> <li>Compiled an overview description of PGE4.5-6.5P1 for Erika Geier to review. (Hoppe)</li> </ul>	
4.6	Nolan	Combined with above.	
5.0	Coleman	<ul style="list-style-type: none"> <li>Assisted Fred in tracing the cause of large surface SW downward aerosol forcing values to be due to the interpolation used on the Daily Gridded MODIS aerosol maps. (Caldwell)</li> <li>Working on modifications for the Terra Edition2B CRS delivery. (Caldwell, Coleman)</li> </ul>	
7.2	Coleman	<ul style="list-style-type: none"> <li>Testing new logic for reading in Daily MATCH files for Terra data sets. Also testing Synoptic SARB Subsystem with sample data files produced from the latest version of the SS7.1 software. (Zentz)</li> </ul>	
12.0	Coleman	<ul style="list-style-type: none"> <li>Provided W. Su with requested ozone and meteorological profile data from the MOA product. (Caldwell)</li> </ul>	
7.1	Nguyen	<ul style="list-style-type: none"> <li>Delivered the code to CM - SCCR number 481. (Nguyen)</li> <li>Made July 1998 TSI movie for the CSTM. (Nguyen)</li> <li>Making January 2001 Terra TSI movie for the CSTM. (Nguyen)</li> <li>Change the outputs from local time to GMT time. (Nguyen)</li> </ul>	
8.0	Nguyen	<ul style="list-style-type: none"> <li>Delivered the code to CM with the HDF compression. SCCR number 461. (Nguyen)</li> </ul>	
10.0	Nguyen	<ul style="list-style-type: none"> <li>Merging and testing the interpolation and average of SS8, SS7, and SS10 code. (Nguyen)</li> </ul>	

**Table 5: November 19, 2003 - Subsystem Issues and Status (4 of 4)**

<b>SS No.</b>	<b>SS Lead</b>	<b>Status</b>	<b>Problems</b>
6.0	Raju	<ul style="list-style-type: none"> <li>Subsystem 6.0 PGEs were delivered to CERES CM on 11/03. (Raju)</li> <li>A FORTRAN program was written to read flux data from FSW product, sort and calculate clear snow DRM values as a function of latitude and csza. Program was compiled and ran using Terra 200104 FSW data inputs. Generated output was sent to TISA science members for review. (Raju)</li> </ul>	
9.0	Raju	<ul style="list-style-type: none"> <li>Subsystem 9.0 PGEs were delivered to CERES CM on 11/03. (Raju)</li> </ul>	
11.0	Stassi	<ul style="list-style-type: none"> <li>Added the module, clrsky_alb_corr_coeffs.f90, to select a clearsky albedo correction factor for the different scene types for each satellite. This correction is applied prior to calculating GGEO cloud properties. (Stassi, Sun-Mack)</li> <li>The January 2001 data was run through 2nd pass processing for all satellites. (Stassi)</li> <li>The script which determines the GOES-9 input file names, GOES_west.csh, was modified to account for January 1999 using the 2-digit year in the filename, while every other month uses the 4-digit year in the filename. (Stassi)</li> <li>The GGEO scripts and source code were modified to be able to run GOES-12 data through the GOES McIDAS code. Problems with the infrared channel calibration are still being investigated. (Stassi)</li> <li>Cold cloud outputs for GMS-5, GOES-8, and GOES-10 were created for July, October 1998, and January, April, July, and October 1999. (Stassi)</li> </ul>	
CERESlib Stassi/Ayers		<ul style="list-style-type: none"> <li>Updated the HDF compression routines on the SCFs. (Kizer, Stassi)</li> <li>Delivered CERESlib to CERES CM. (Stassi)</li> </ul>	